



**CALIFORNIA**  
High-Speed Rail Authority

# *High, Medium, Low Cash Flows*

**DRAFT 2014 BUSINESS PLAN**

**Section 6:** *Financial Analysis and Funding*

# California High-Speed Rail System



## **DRAFT** 2014 BUSINESS PLAN TECHNICAL SUPPORTING DOCUMENT

High, Medium, Low Cash Flows

February 2014

## ***Project Cash Flow Analysis***

Section 6 provides a description of assumptions and potential cash flows from the high-speed rail system for the high, medium, and low ridership projections. Each scenario's net project cash flows through Phase 1 Blended (YOE dollars in millions) through 2060 are included in this appendix. The net project cash flow calculation begins with the net cash flow from operations (revenue less operations and maintenance costs). Depreciation is a non-cash item and is excluded from this calculation. To account for capital replacement needs, the projected annual expenditures for repairing and replacing capital assets over time, including trains, equipment, and rail infrastructure, are then deducted to arrive at net operating cash flow after capital replacement costs. This represents the net cash flow available to be used for capital purposes and is before consideration of any debt service or investment returns.

This analysis provides an understanding of how total revenues, operating and maintenance costs, capital replacement, and construction costs interact together without regard to sources.

The cash flows included herein are based on assumptions related to revenues, operating and maintenance costs, capital replacement costs, and capital costs as described in the Draft 2014 Business Plan.



**Exhibit 1. Net Project Cash Flow Through Phase 1 Blended (YOE dollars in millions) HIGH Case**

\$'MM YOE	Total Cash Flow through 2060	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue	\$195,328	-	-	-	-	-	-	-	-	-
Less: O&M	(\$86,955)	-	-	-	-	-	-	-	-	-
<b>Net cash flow from operations</b>	<b>\$108,373</b>	-	-	-	-	-	-	-	-	-
Capital replacement	(\$24,163)	-	-	-	-	-	-	-	-	-
<b>Net operating cash flow after capital replacement</b>	<b>\$84,210</b>	-	-	-	-	-	-	-	-	-
Capital cost	(\$67,593)	(212)	(915)	(4,189)	(4,198)	(4,425)	(5,682)	(5,257)	(4,946)	(5,295)
<b>Net project cash flow</b>	<b>\$16,617</b>	<b>(212)</b>	<b>(915)</b>	<b>(4,189)</b>	<b>(4,198)</b>	<b>(4,425)</b>	<b>(5,682)</b>	<b>(5,257)</b>	<b>(4,946)</b>	<b>(5,295)</b>
<b>Cumulative net project cash flow</b>		<b>(212)</b>	<b>(1,127)</b>	<b>(5,316)</b>	<b>(9,514)</b>	<b>(13,939)</b>	<b>(19,621)</b>	<b>(24,878)</b>	<b>(29,824)</b>	<b>(35,119)</b>



**Exhibit 1. Net Project Cash Flow Through Phase 1 Blended (YOE dollars in millions) HIGH Case (continued)**

\$'MM YOE	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Revenue	437	640	860	1,102	1,370	1,690	1,878	2,289	2,595	2,897
Less: O&M	(340)	(378)	(471)	(558)	(605)	(939)	(989)	(1,410)	(1,476)	(1,534)
<b>Net cash flow from operations</b>	<b>97</b>	<b>262</b>	<b>389</b>	<b>544</b>	<b>765</b>	<b>751</b>	<b>889</b>	<b>879</b>	<b>1,119</b>	<b>1,363</b>
Capital replacement	-	-	-	-	-	-	-	-	-	(113)
<b>Net operating cash flow after capital replacement</b>	<b>97</b>	<b>262</b>	<b>389</b>	<b>544</b>	<b>765</b>	<b>751</b>	<b>889</b>	<b>879</b>	<b>1,119</b>	<b>1,250</b>
Capital cost	(4,725)	(6,210)	(6,396)	(6,588)	(3,624)	(2,430)	(2,503)	-	-	-
<b>Net project cash flow</b>	<b>(4,627)</b>	<b>(5,947)</b>	<b>(6,007)</b>	<b>(6,044)</b>	<b>(2,859)</b>	<b>(1,679)</b>	<b>(1,614)</b>	<b>879</b>	<b>1,119</b>	<b>1,250</b>
<b>Cumulative net project cash flow</b>	<b>(39,746)</b>	<b>(45,694)</b>	<b>(51,701)</b>	<b>(57,745)</b>	<b>(60,604)</b>	<b>(62,282)</b>	<b>(63,896)</b>	<b>(63,017)</b>	<b>(61,898)</b>	<b>(60,648)</b>



**Exhibit 1. Net Project Cash Flow Through Phase 1 Blended (YOE dollars in millions) HIGH Case (continued)**

\$'MM YOE	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Revenue	3,121	3,363	3,523	3,690	3,864	4,047	4,238	4,439	4,649	4,837
Less: O&M	(1,592)	(1,650)	(1,705)	(1,761)	(1,836)	(1,901)	(1,971)	(2,043)	(2,119)	(2,194)
<b>Net cash flow from operations</b>	<b>1,529</b>	<b>1,713</b>	<b>1,818</b>	<b>1,929</b>	<b>2,028</b>	<b>2,146</b>	<b>2,267</b>	<b>2,396</b>	<b>2,530</b>	<b>2,642</b>
Capital replacement	(116)	(73)	(1)	(1)	(73)	(111)	(112)	(82)	(128)	(314)
<b>Net operating cash flow after capital replacement</b>	<b>1,413</b>	<b>1,640</b>	<b>1,817</b>	<b>1,927</b>	<b>1,955</b>	<b>2,035</b>	<b>2,155</b>	<b>2,314</b>	<b>2,401</b>	<b>2,328</b>
Capital cost	-	-	-	-	-	-	-	-	-	-
<b>Net project cash flow</b>	<b>1,413</b>	<b>1,640</b>	<b>1,817</b>	<b>1,927</b>	<b>1,955</b>	<b>2,035</b>	<b>2,155</b>	<b>2,314</b>	<b>2,401</b>	<b>2,328</b>
<b>Cumulative net project cash flow</b>	<b>(59,235)</b>	<b>(57,595)</b>	<b>(55,779)</b>	<b>(53,852)</b>	<b>(51,896)</b>	<b>(49,861)</b>	<b>(47,706)</b>	<b>(45,392)</b>	<b>(42,991)</b>	<b>(40,663)</b>



**Exhibit 1. Net Project Cash Flow Through Phase 1 Blended (YOE dollars in millions) HIGH Case (continued)**

\$'MM YOE	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Revenue	5,033	5,236	5,447	5,667	5,896	6,134	6,382	6,640	6,908	7,187
Less: O&M	(2,265)	(2,345)	(2,421)	(2,519)	(2,606)	(2,692)	(2,787)	(2,888)	(2,977)	(3,088)
<b>Net cash flow from operations</b>	<b>2,767</b>	<b>2,891</b>	<b>3,026</b>	<b>3,148</b>	<b>3,290</b>	<b>3,442</b>	<b>3,595</b>	<b>3,752</b>	<b>3,932</b>	<b>4,099</b>
Capital replacement	(354)	(293)	(201)	(176)	(381)	(470)	(474)	(444)	(1,227)	(1,408)
<b>Net operating cash flow after capital replacement</b>	<b>2,413</b>	<b>2,598</b>	<b>2,825</b>	<b>2,972</b>	<b>2,908</b>	<b>2,972</b>	<b>3,121</b>	<b>3,308</b>	<b>2,704</b>	<b>2,691</b>
Capital cost	-	-	-	-	-	-	-	-	-	-
<b>Net project cash flow</b>	<b>2,413</b>	<b>2,598</b>	<b>2,825</b>	<b>2,972</b>	<b>2,908</b>	<b>2,972</b>	<b>3,121</b>	<b>3,308</b>	<b>2,704</b>	<b>2,691</b>
<b>Cumulative net project cash flow</b>	<b>(38,250)</b>	<b>(35,651)</b>	<b>(32,826)</b>	<b>(29,855)</b>	<b>(26,946)</b>	<b>(23,974)</b>	<b>(20,853)</b>	<b>(17,545)</b>	<b>(14,841)</b>	<b>(12,149)</b>



**Exhibit 1. Net Project Cash Flow Through Phase 1 Blended (YOE dollars in millions) HIGH Case (continued)**

\$'MM YOE	2052	2053	2054	2055	2056	2057	2058	2059	2060
Revenue	7,478	7,780	8,095	8,421	8,762	9,115	9,484	9,868	10,266
Less: O&M	(3,182)	(3,301)	(3,406)	(3,525)	(3,641)	(3,777)	(3,892)	(4,019)	(4,153)
<b>Net cash flow from operations</b>	<b>4,296</b>	<b>4,479</b>	<b>4,688</b>	<b>4,896</b>	<b>5,121</b>	<b>5,338</b>	<b>5,593</b>	<b>5,849</b>	<b>6,113</b>
Less: capital replacement	(1,782)	(1,987)	(2,306)	(1,868)	(1,820)	(2,072)	(1,897)	(2,026)	(1,850)
<b>Net operating cash flow after capital replacement</b>	<b>2,514</b>	<b>2,492</b>	<b>2,383</b>	<b>3,028</b>	<b>3,300</b>	<b>3,266</b>	<b>3,696</b>	<b>3,823</b>	<b>4,264</b>
Less: capital cost	-	-	-	-	-	-	-	-	-
<b>Net project cash flow</b>	<b>2,514</b>	<b>2,492</b>	<b>2,383</b>	<b>3,028</b>	<b>3,300</b>	<b>3,266</b>	<b>3,696</b>	<b>3,823</b>	<b>4,264</b>
<b>Cumulative net project cash flow</b>	<b>(9,636)</b>	<b>(7,143)</b>	<b>(4,761)</b>	<b>(1,732)</b>	<b>1,568</b>	<b>4,834</b>	<b>8,530</b>	<b>12,353</b>	<b>16,617</b>





**Exhibit 2. Net Project Cash Flow Through Phase 1 Blended (YOE dollars in millions) MEDIUM Case**

\$'MM YOE	Total Cash Flow through 2060	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue	152,326	-	-	-	-	-	-	-	-	-
Less: O&M	(77,235)	-	-	-	-	-	-	-	-	-
<b>Net cash flow from operations</b>	<b>75,091</b>	-	-	-	-	-	-	-	-	-
Capital replacement	(22,185)	-	-	-	-	-	-	-	-	-
<b>Net operating cash flow after capital replacement</b>	<b>52,906</b>	-	-	-	-	-	-	-	-	-
Capital cost	(67,593)	(212)	(915)	(4,189)	(4,198)	(4,425)	(5,682)	(5,257)	(4,946)	(5,295)
<b>Net project cash flow</b>	<b>(14,687)</b>	<b>(212)</b>	<b>(915)</b>	<b>(4,189)</b>	<b>(4,198)</b>	<b>(4,425)</b>	<b>(5,682)</b>	<b>(5,257)</b>	<b>(4,946)</b>	<b>(5,295)</b>
<b>Cumulative net project cash flow</b>		<b>(212)</b>	<b>(1,127)</b>	<b>(5,316)</b>	<b>(9,514)</b>	<b>(13,939)</b>	<b>(19,621)</b>	<b>(24,878)</b>	<b>(29,824)</b>	<b>(35,119)</b>



**Exhibit 2. Net Project Cash Flow Through Phase 1 Blended (YOE dollars in millions) MEDIUM Case (continued)**

\$'MM YOE	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Revenue	324	475	639	819	1,019	1,289	1,441	1,772	2,018	2,264
Less: O&M	(300)	(334)	(418)	(496)	(538)	(835)	(880)	(1,253)	(1,312)	(1,363)
<b>Net cash flow from operations</b>	<b>24</b>	<b>141</b>	<b>221</b>	<b>323</b>	<b>481</b>	<b>454</b>	<b>561</b>	<b>519</b>	<b>707</b>	<b>901</b>
Capital replacement	-	-	-	-	-	-	-	-	-	(104)
<b>Net operating cash flow after capital replacement</b>	<b>24</b>	<b>141</b>	<b>221</b>	<b>323</b>	<b>481</b>	<b>454</b>	<b>561</b>	<b>519</b>	<b>707</b>	<b>797</b>
Capital cost	(4,725)	(6,210)	(6,396)	(6,588)	(3,624)	(2,430)	(2,503)	-	-	-
<b>Net project cash flow</b>	<b>(4,701)</b>	<b>(6,069)</b>	<b>(6,175)</b>	<b>(6,265)</b>	<b>(3,142)</b>	<b>(1,976)</b>	<b>(1,942)</b>	<b>519</b>	<b>707</b>	<b>797</b>
<b>Cumulative net project cash flow</b>	<b>(39,820)</b>	<b>(45,888)</b>	<b>(52,063)</b>	<b>(58,328)</b>	<b>(61,470)</b>	<b>(63,446)</b>	<b>(65,388)</b>	<b>(64,869)</b>	<b>(64,162)</b>	<b>(63,365)</b>



**Exhibit 2. Net Project Cash Flow Through Phase 1 Blended (YOE dollars in millions) MEDIUM Case (continued)**

\$'MM YOE	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Revenue	2,439	2,626	2,751	2,881	3,017	3,160	3,310	3,467	3,631	3,778
Less: O&M	(1,414)	(1,466)	(1,514)	(1,565)	(1,631)	(1,689)	(1,751)	(1,815)	(1,882)	(1,949)
<b>Net cash flow from operations</b>	<b>1,025</b>	<b>1,160</b>	<b>1,236</b>	<b>1,317</b>	<b>1,386</b>	<b>1,471</b>	<b>1,559</b>	<b>1,652</b>	<b>1,749</b>	<b>1,829</b>
Capital replacement	(107)	(67)	(1)	(1)	(67)	(102)	(103)	(75)	(118)	(289)
<b>Net operating cash flow after capital replacement</b>	<b>918</b>	<b>1,093</b>	<b>1,235</b>	<b>1,315</b>	<b>1,320</b>	<b>1,370</b>	<b>1,456</b>	<b>1,577</b>	<b>1,632</b>	<b>1,541</b>
Capital cost	-	-	-	-	-	-	-	-	-	-
<b>Net project cash flow</b>	<b>918</b>	<b>1,093</b>	<b>1,235</b>	<b>1,315</b>	<b>1,320</b>	<b>1,370</b>	<b>1,456</b>	<b>1,577</b>	<b>1,632</b>	<b>1,541</b>
<b>Cumulative net project cash flow</b>	<b>(62,447)</b>	<b>(61,354)</b>	<b>(60,119)</b>	<b>(58,804)</b>	<b>(57,484)</b>	<b>(56,115)</b>	<b>(54,659)</b>	<b>(53,082)</b>	<b>(51,451)</b>	<b>(49,910)</b>



**Exhibit 2. Net Project Cash Flow Through Phase 1 Blended (YOE dollars in millions) MEDIUM Case (continued)**

\$'MM YOE	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Revenue	3,931	4,089	4,255	4,426	4,605	4,792	4,985	5,186	5,396	5,614
Less: O&M	(2,011)	(2,082)	(2,150)	(2,237)	(2,315)	(2,391)	(2,475)	(2,565)	(2,644)	(2,743)
<b>Net cash flow from operations</b>	<b>1,919</b>	<b>2,008</b>	<b>2,105</b>	<b>2,189</b>	<b>2,291</b>	<b>2,401</b>	<b>2,510</b>	<b>2,622</b>	<b>2,753</b>	<b>2,871</b>
Capital replacement	(325)	(269)	(185)	(162)	(350)	(432)	(436)	(408)	(1,127)	(1,293)
<b>Net operating cash flow after capital replacement</b>	<b>1,594</b>	<b>1,739</b>	<b>1,920</b>	<b>2,028</b>	<b>1,940</b>	<b>1,969</b>	<b>2,074</b>	<b>2,214</b>	<b>1,626</b>	<b>1,579</b>
Capital cost	-	-	-	-	-	-	-	-	-	-
<b>Net project cash flow</b>	<b>1,594</b>	<b>1,739</b>	<b>1,920</b>	<b>2,028</b>	<b>1,940</b>	<b>1,969</b>	<b>2,074</b>	<b>2,214</b>	<b>1,626</b>	<b>1,579</b>
<b>Cumulative net project cash flow</b>	<b>(48,315)</b>	<b>(46,577)</b>	<b>(44,656)</b>	<b>(42,629)</b>	<b>(40,688)</b>	<b>(38,719)</b>	<b>(36,645)</b>	<b>(34,431)</b>	<b>(32,805)</b>	<b>(31,227)</b>



**Exhibit 2. Net Project Cash Flow Through Phase 1 Blended (YOE dollars in millions) MEDIUM Case (continued)**

\$'MM YOE	2052	2053	2054	2055	2056	2057	2058	2059	2060
Revenue	5,842	6,077	6,323	6,579	6,845	7,121	7,409	7,709	8,020
Less: O&M	(2,826)	(2,932)	(3,025)	(3,131)	(3,234)	(3,355)	(3,457)	(3,570)	(3,689)
<b>Net cash flow from operations</b>	<b>3,016</b>	<b>3,146</b>	<b>3,298</b>	<b>3,448</b>	<b>3,610</b>	<b>3,766</b>	<b>3,952</b>	<b>4,139</b>	<b>4,331</b>
Less: capital replacement	(1,637)	(1,824)	(2,117)	(1,715)	(1,671)	(1,903)	(1,742)	(1,860)	(1,698)
<b>Net operating cash flow after capital replacement</b>	<b>1,379</b>	<b>1,322</b>	<b>1,181</b>	<b>1,733</b>	<b>1,939</b>	<b>1,863</b>	<b>2,210</b>	<b>2,279</b>	<b>2,633</b>
Less: capital cost	-	-	-	-	-	-	-	-	-
<b>Net project cash flow</b>	<b>1,379</b>	<b>1,322</b>	<b>1,181</b>	<b>1,733</b>	<b>1,939</b>	<b>1,863</b>	<b>2,210</b>	<b>2,279</b>	<b>2,633</b>
<b>Cumulative net project cash flow</b>	<b>(29,848)</b>	<b>(28,526)</b>	<b>(27,345)</b>	<b>(25,612)</b>	<b>(23,673)</b>	<b>(21,810)</b>	<b>(19,600)</b>	<b>(17,320)</b>	<b>(14,687)</b>



**Exhibit 3. Net Project Cash Flow Through Phase 1 Blended (YOE dollars in millions) LOW Case**

\$'MM YOE	Total Cash Flow through 2060	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue	114,392	-	-	-	-	-	-	-	-	-
Less: O&M	(69,392)	-	-	-	-	-	-	-	-	-
<b>Net cash flow from operations</b>	<b>45,000</b>	-	-	-	-	-	-	-	-	-
Capital replacement	(20,123)	-	-	-	-	-	-	-	-	-
<b>Net operating cash flow after capital replacement</b>	<b>24,877</b>	-	-	-	-	-	-	-	-	-
Capital cost	(67,593)	(212)	(915)	(4,189)	(4,198)	(4,425)	(5,682)	(5,257)	(4,946)	(5,295)
<b>Net project cash flow</b>	<b>(42,716)</b>	<b>(212)</b>	<b>(915)</b>	<b>(4,189)</b>	<b>(4,198)</b>	<b>(4,425)</b>	<b>(5,682)</b>	<b>(5,257)</b>	<b>(4,946)</b>	<b>(5,295)</b>
<b>Cumulative net project cash flow</b>		<b>(212)</b>	<b>(1,127)</b>	<b>(5,316)</b>	<b>(9,514)</b>	<b>(13,939)</b>	<b>(19,621)</b>	<b>(24,878)</b>	<b>(29,824)</b>	<b>(35,119)</b>



**Exhibit 3. Net Project Cash Flow Through Phase 1 Blended (YOE dollars in millions) LOW Case (continued)**

\$'MM YOE	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Revenue	234	338	456	585	729	936	1,050	1,306	1,497	1,692
Less: O&M	(284)	(312)	(377)	(438)	(473)	(734)	(772)	(1,121)	(1,173)	(1,218)
<b>Net cash flow from operations</b>	<b>(50)</b>	<b>27</b>	<b>79</b>	<b>147</b>	<b>256</b>	<b>202</b>	<b>278</b>	<b>185</b>	<b>325</b>	<b>474</b>
Capital replacement	-	-	-	-	-	-	-	-	-	(94)
<b>Net operating cash flow after capital replacement</b>	<b>(50)</b>	<b>27</b>	<b>79</b>	<b>147</b>	<b>256</b>	<b>202</b>	<b>278</b>	<b>185</b>	<b>325</b>	<b>380</b>
Capital cost	(4,725)	(6,210)	(6,396)	(6,588)	(3,624)	(2,430)	(2,503)	-	-	-
<b>Net project cash flow</b>	<b>(4,774)</b>	<b>(6,183)</b>	<b>(6,317)</b>	<b>(6,441)</b>	<b>(3,367)</b>	<b>(2,227)</b>	<b>(2,224)</b>	<b>185</b>	<b>325</b>	<b>380</b>
<b>Cumulative net project cash flow</b>	<b>(39,893)</b>	<b>(46,076)</b>	<b>(52,393)</b>	<b>(58,833)</b>	<b>(62,201)</b>	<b>(64,428)</b>	<b>(66,653)</b>	<b>(66,468)</b>	<b>(66,144)</b>	<b>(65,764)</b>



**Exhibit 3. Net Project Cash Flow Through Phase 1 Blended (YOE dollars in millions) LOW Case (continued)**

\$'MM YOE	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Revenue	1,829	1,976	2,070	2,168	2,271	2,378	2,491	2,609	2,732	2,843
Less: O&M	(1,264)	(1,311)	(1,354)	(1,399)	(1,458)	(1,510)	(1,565)	(1,624)	(1,700)	(1,760)
<b>Net cash flow from operations</b>	<b>565</b>	<b>665</b>	<b>715</b>	<b>769</b>	<b>813</b>	<b>868</b>	<b>926</b>	<b>986</b>	<b>1,032</b>	<b>1,082</b>
Capital replacement	(97)	(61)	(1)	(1)	(60)	(92)	(93)	(68)	(107)	(262)
<b>Net operating cash flow after capital replacement</b>	<b>468</b>	<b>604</b>	<b>714</b>	<b>768</b>	<b>752</b>	<b>776</b>	<b>832</b>	<b>918</b>	<b>925</b>	<b>821</b>
Capital cost	-	-	-	-	-	-	-	-	-	-
<b>Net project cash flow</b>	<b>468</b>	<b>604</b>	<b>714</b>	<b>768</b>	<b>752</b>	<b>776</b>	<b>832</b>	<b>918</b>	<b>925</b>	<b>821</b>
<b>Cumulative net project cash flow</b>	<b>(65,296)</b>	<b>(64,691)</b>	<b>(63,977)</b>	<b>(63,209)</b>	<b>(62,457)</b>	<b>(61,681)</b>	<b>(60,849)</b>	<b>(59,931)</b>	<b>(59,006)</b>	<b>(58,185)</b>





**Exhibit 3. Net Project Cash Flow Through Phase 1 Blended (YOE dollars in millions) LOW Case (continued)**

\$'MM YOE	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Revenue	2,958	3,077	3,202	3,331	3,466	3,606	3,752	3,904	4,062	4,226
Less: O&M	(1,818)	(1,880)	(1,941)	(2,017)	(2,085)	(2,153)	(2,227)	(2,307)	(2,379)	(2,467)
<b>Net cash flow from operations</b>	<b>1,140</b>	<b>1,197</b>	<b>1,260</b>	<b>1,314</b>	<b>1,381</b>	<b>1,453</b>	<b>1,525</b>	<b>1,596</b>	<b>1,682</b>	<b>1,758</b>
Capital replacement	(295)	(244)	(167)	(147)	(318)	(392)	(395)	(370)	(1,022)	(1,173)
<b>Net operating cash flow after capital replacement</b>	<b>845</b>	<b>953</b>	<b>1,093</b>	<b>1,167</b>	<b>1,063</b>	<b>1,062</b>	<b>1,130</b>	<b>1,226</b>	<b>660</b>	<b>586</b>
Capital cost	-	-	-	-	-	-	-	-	-	-
<b>Net project cash flow</b>	<b>845</b>	<b>953</b>	<b>1,093</b>	<b>1,167</b>	<b>1,063</b>	<b>1,062</b>	<b>1,130</b>	<b>1,226</b>	<b>660</b>	<b>586</b>
<b>Cumulative net project cash flow</b>	<b>(57,340)</b>	<b>(56,387)</b>	<b>(55,294)</b>	<b>(54,127)</b>	<b>(53,064)</b>	<b>(52,002)</b>	<b>(50,872)</b>	<b>(49,646)</b>	<b>(48,986)</b>	<b>(48,400)</b>



**Exhibit 3. Net Project Cash Flow Through Phase 1 Blended (YOE dollars in millions) LOW Case (continued)**

\$'MM YOE	2052	2053	2054	2055	2056	2057	2058	2059	2060
Revenue	4,397	4,575	4,760	4,952	5,153	5,361	5,578	5,804	6,038
Less: O&M	(2,544)	(2,638)	(2,723)	(2,817)	(2,908)	(3,014)	(3,105)	(3,206)	(3,313)
<b>Net cash flow from operations</b>	<b>1,853</b>	<b>1,937</b>	<b>2,037</b>	<b>2,135</b>	<b>2,244</b>	<b>2,346</b>	<b>2,473</b>	<b>2,597</b>	<b>2,725</b>
Less: capital replacement	(1,484)	(1,654)	(1,920)	(1,556)	(1,516)	(1,726)	(1,580)	(1,687)	(1,540)
<b>Net operating cash flow after capital replacement</b>	<b>368</b>	<b>282</b>	<b>117</b>	<b>579</b>	<b>728</b>	<b>621</b>	<b>893</b>	<b>910</b>	<b>1,185</b>
Less: capital cost	-	-	-	-	-	-	-	-	-
<b>Net project cash flow</b>	<b>368</b>	<b>282</b>	<b>117</b>	<b>579</b>	<b>728</b>	<b>621</b>	<b>893</b>	<b>910</b>	<b>1,185</b>
<b>Cumulative net project cash flow</b>	<b>(48,032)</b>	<b>(47,749)</b>	<b>(47,632)</b>	<b>(47,053)</b>	<b>(46,325)</b>	<b>(45,704)</b>	<b>(44,811)</b>	<b>(43,901)</b>	<b>(42,716)</b>

